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Socio-psychological variables that influence the extent to which older people (age: 50+) will be consumers of education are examined to arrive at criteria for programs appropriate to the developmental needs of this group. Research indicates that two primary influences are changes in learning abilities and interests. Secondary influences include social factors (e.g. societal expectations about the role of older people, availability of educational opportunity) and personal factors (e.g. levels of physical and mental health, income, mobility, and preparatory education). The challenge to practitioners working with older persons is to diagnose the patterns that inhibit educational consumption and modify those so as to enable older persons more effectively to use education to achieve their own objectives. (A bibliography is included.) (dm)

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OLDER PEOPLE AS CONSUMERS OF EDUCATION

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To become a consumer of a product or a service, a person must have both the interest and the ability to do so. In analyzing older people as consumers of education, it is important not only to review what we know about the ability and interest of older people regarding continuing education for adults, but also to carefully specify the characteristics of the education that they are to consume. This specification is important because the way in which "education for older people" is defined, influences the interpretation of tested knowledge regarding the learning abilities and interest of older people. The phrase older people refers to the age range between 50 and 80.

Continuing Education for Adults

It is assumed that education results in learning, but that there are additional criteria that must be met if an activity is to be classified as educational. One criteria is that as the adult engages in the learning activity, a primary *purpose* of the learner should be the modification of knowledge, skills, and attitudes. An adult who viewed a single program in an educational television (E.T.V.) literature course in which he was interested enough to enroll would therefore qualify, whereas another adult who happened to view the same program for entertainment purposes would not. A second criteria for an activity to be defined as education is that it be systematic and sustained. An adult who decided upon a topic on which he would like to increase his knowledge, who selected a relevant sequence of books and articles, and who periodically evaluated his progress would therefore qualify, whereas another adult who happened to read one of the articles would not. A third criteria related to the second is that someone perform the mentor role consisting of helping to establish objectives, select and organize relevant learning activities, and evaluate progress. The mentor role may be performed by a teacher in a group setting, a

counselor-tutor in an individual setting, a writer in a mass media setting, or the learner may perform the role for himself.

To define education for adults in this somewhat restricted way should not imply that other ways in which adults learn are less important. Certainly, informal information seeking through print and electronic media or through interpersonal contact is essential for most adults to function effectively and to adapt gradually to changing circumstances. In addition, exposure to the arts and humanities provides experiences that enrich and enoble. However, activities defined as education in this more restricted way provide a somewhat different reference point for generalizing about the abilities and interests of older people than does the wider range of informal information seeking activities and participation in cultural activities. It is in relation to this narrower definition of education that the abilities and interests of older people will be described, relative to their roles as consumers of education.

The broad field of adult and continuing education contains a great variety of programs, in terms of educational objectives and types of teaching-learning transactions. The content reflected in the objectives covers the wide range of man's subject matter knowledge. The behavioral changes reflected in the objectives include modification of information, understanding of relationships, critical judgement, creative imagination, skills, attitudes, and competence. Adult education participants seek to achieve educational objectives within four types of settings in which the teaching-learning transaction occurs, individual, group, organizational, and community. The *individual* setting includes correspondence study and E.T.V. courses. The *temporary group* setting includes the typical evening class in which adults without previous contact assemble for the class each week and at the end of the course go their separate ways. The *organizational* setting includes in-service training for work groups in which the prior and subsequent working relationships between the learners have a major influence on the program. The *community* setting emphasizes

working relationships between different organizations and segments of a neighborhood or community. Within each of these four settings, the balance of responsibility for planning and directing the learning experience may rest with the mentor, or with the learner, or at some intermediate point of shared responsibility. In combination, these two dimensions of setting and locus of responsibility provide a basis for the classification of types of teaching-learning transactions that is provided in Table 1. The illustrative methods in each of the cells of the matrix do not occur exclusively in that category but instead typify the characteristics of the category.

In current practice, educational programs especially for older people, as do adult education programs generally, include only a few of the many available educational objectives and settings. If a major reason for analyzing adult education programs in relation to older persons is to identify arrangements that will encourage more older persons to participate, then the characteristics of currently available programs can be usefully viewed as an influence on the decision to participate as well as a reflection of the educational needs of older adults. If this is the case, then a major implication of an analysis of the abilities and intersts of older people as consumers of education should be a list of criteria for selecting educational programs that will be most appropriate for older people. For example, in the planning of educational programs for older persons, it is important to recognize that there is an exceedingly wide range of individual differences for older adults, which should be paralleled by a comparably wide range of programs. No single program for "the older adult" is going to serve the needs of more than a narrow segment of older persons. The following sections provide a summary of research findings regarding adult learning abilities and interests that should be useful to persons who plan educational programs for older people.

Table 1 CLASSIFICATION OF ADULT EDUCATION LEARNING-TEACHING METHODS

SETTING	(Primary responsibility for planning and directing learning activities)			
Category	LEARNER	LEARNER (mentor)	MENTOR (learner)	MENTOR
INDIVIDUAL Interpersonal	group visits	non-directive counseling	supervisory coaching	Psycho-evaluation
Mediated print	self directed reading on topic	library readers advisory service	correspondence course	How-to-do-it book
electronic	select related films, T.V. programs	film forum	T.V. course with materials, phoning	T.V. course, no materials
TEMPORARY GROUP Small	study-discussion	brainstorming, seminar, workshop	case study, role play	lecture-discussion, process demonstration
Large	problem clinic, buzz groups	listening panel, lecture from problems presented	lecture-questions, interview resource person	lecture, forum, panel, symposium
ORGANIZATIONAL Small	informal staff study groups	staff meeting series on organizational problems	training sessions for work teams	discuss management consultants recommendations
Large	organizational self study	educational community development organizational conference	action research	members react to proposal for organizational change
COMMUNITY Small	community problems discussion group	action seminar	demonstration project	technical briefing of community leaders on issue
Large	field trips to other segments of community	result demonstration	community survey	lecture series on community problems

Learning Ability In Relation to Age

This summary of learning ability in relation to age focuses on three aspects--indices of learning ability, general trends in learning performance during adulthood, and major factors that modify performance.

One way of estimating learning ability is by use of an intelligence test. The standard ways of obtaining intelligence test scores are based on the assumption that all people of a given age have had equal access to a similar environment, and that people with greater ability to learn will do a better job of figuring out unfamiliar learning tasks and will have accumulated experience that will make more of the tasks familiar.

Another way of estimating learning ability is to compare what a person knows or is able to do at the beginning of a learning experience with what he knows or is able to do at the end of the learning experience, or several weeks or months later. Assuming that the estimates of what a person knows are reliable and valid in terms of the objectives of the learning experience, by subtracting the pre-test results from the results of the post-tests, it is possible to obtain an estimate of learning gains or retention.

One of the best ways to discover how the ability to learn changes as people get older is to periodically use one or both of the two foregoing methods of estimating learning ability with the same representative sample of persons; resulting in longitudinal findings. A somewhat less effective way to estimate the relation between learning ability and age is to compare samples of different persons at different ages; resulting in cross-sectional findings based on comparisons of age cohorts. The validity of the latter approach is reduced to the extent that the characteristics of the age cohorts used for comparison differ greatly. Unfortunately, very little research using any method has been conducted regarding the relation between learning ability and age for adults, compared with the relatively large number of studies using pre-adults. Perhaps the most effective and efficient way to study the relationship between learning

ability and age is a combination of longitudinal and cross-sectional procedures in which a longitudinal follow-up is conducted five or ten years after a cross-sectional study to indicate the extent to which cross-sectional trends parallel longitudinal shifts for the same age cohorts at older ages. Of course, a cross-sectional study is well suited to discover the distribution of age differences in learning performance of a current representative sample of adults, regardless of how their performance may change with age.

The only two major longitudinal studies of adult learning that have been conducted have demonstrated that children and adolescents do not perform as well on intelligence tests as they do later when they become young adults, and that they perform even better when they are in their forties and fifties. This generalization is restricted by the fact that both study populations were above average in learning ability, and by the fact that although performance on most sub-tests improved significantly with age, for some there was no significant change, and for a few there was a decline with age. The study by Owens (1953) was a follow-up thirty and forty years later of a college freshman class who in 1919 took an early standardized intelligence test, the Army Alpha. The study by Bayley and Oden (1955) was a longitudinal study of some of Terman's subjects from childhood through their forties. How below average adults would perform over the years on an intelligence test is largely a matter of conjecture. A study by Charles (1953) compared retest I.Q.'s for a sample of adults who had been diagnosed in childhood as feeble minded. All individuals improved on the retest, with an average increase of more than twenty I.Q. points. None of the longitudinal studies have extended beyond 60 years of age.

Two of the best known cross-sectional studies of adult learning were conducted by Jones and Conrad (1933) and by Thorndike (1928). Jones and Conrad invited children and adults in some small New England towns to a free movie and while they were there had them complete an intelligence test. The relationship between performance and age was an increase through childhood and adolescence,

a leveling off during young adulthood, and a steady decline through middle and old age. The investigators, however, did not control for such variables as level of education, type of occupation, or interest in taking the test. The study by Thorndike, based on university graduate students, mostly in their twenties, thirties and forties, seemed to indicate that the older adults did not learn as well on a series of learning experiments as did the younger adults. A reanalysis of the data by Rhyne (1961), however, indicated that this was not the case but was the product of faulty analysis.

Two additional studies, one by Lorge (1936) and the other by Sorenson (1938) pointed out the influence of time limits on the learning task and of practice in learning and study activities. Lorge emphasized the distinction between speed and power in tests of intellectual ability, indicating that time limits tend to depress performance by older adults. More recent studies have indicated that the influence of time limits is, however, small. Sorenson compared elementary school teachers regarding achievement in a summer credit course. When the teachers were grouped by recency of course work and the groups were statistically equated regarding learning ability, for those without recent course experience achievement declined significantly with age. By comparison, for those with recent course experience the older and younger teachers achieved about equally.

In a recent national study by Knox and Sjogren (1965) based on adults who enrolled in university adult education classes, the younger adults did not achieve as well as did the older adults, and for adults of comparable intelligence and level of education there was no significant difference in achievement related to age. A carefully controlled experimental study of adult learning was conducted by Sjogren and Knox (1965). The findings from this two year study, consisting of four learning experiments and the *Wechsler Adult Intelligence Scale* administered to the same sample of adults, are extensive and are presented in the final report to the Research Branch of the

U.S. Office of Education. One section of the findings is pertinent to this review on the relation between learning ability and age for adults. The sample of about two hundred men and women, was stratified to allow analysis of learning achievement in relation to age, level of education, and degree of prior adult education participation. The study was designed to provide a somewhat representative sample of adults, 18 through 65 years of age, to allow substantial generalization of findings to the general adult population. The findings were, of course, based on the performance of the adults who were selected from those who volunteered for the project. The adults participated in four learning experiments that were each replicated several times using different subject matter areas. For each experiment, the participants took a pre-test, and then a retest one to two weeks later, and finally a follow-up test six months later.

Although the age comparisons were based on different people at different ages, the findings were consistent with the longitudinal studies of Owens (1953), and others, that have compared the same people at different ages. There were two major indices of learning ability, achievement in the learning experiments and score on the *Wechsler Adult Intelligence Scale* (WAIS).

The most consistent result across the experiments was the lack of apparent relationship between the age of the subject and performance on any of the criterion measures. Age served as a classification in each analysis of the criterion measures. There were three age categories in the classification; under 31, 31 through 44, and 45 through 65. This classification did not account for a significant portion of the variance in any of the criterion analyses. The sample selection procedure was such that level of education and mental ability were constant across the age groups. In such a situation, age, if related to performance, should have accounted for a significant portion of the criterion test variance, but it did not. One more bit of evidence was thereby presented to dispel the stereotype of the adult becoming a less effective learner with advancement in age, at least until age 65.

On the WAIS, the older adults in the study scored significantly higher than older adults in the general population; but for the adults in the study there was no differnece between the total WAIS scores for older and younger participants. Part of the reason for the seeming discrepancy was because in the study sample, the distribution of level of education for older and younger adults was the same, whereas in the general population, older adults have less education. The comparison between age groups on the WAIS sub-tests supported the findings of previous research (Birren, 1963) in which the level of performance on information, comprehension, and verbal items tended to increase steadily with age, and the level of performance on perceptual and timed items tended to decrease with age.

A second finding concerned the relationship between prior adult education participation and learning ability. In the study sample, half of the adults had taken part in some adult education program in the previous year, the other half had not done so in the previous five years. There was no significant difference between the two groups in terms of such variables as age, intelligence, level of formal education, proportion of men and women, interest, etc. The adult education participants achieved significantly better in the learning units all the way through the project, than did those who had not been active in adult education in the previous five years. This provided powerful support for the early research conclusions of Sorenson (1938), and the recent conclusion of Houle (1964), that learning ability can decline with disuse.

Any conclusions that can be drawn at the present time must be somewhat tentative. Clearly, people vary in their ability to learn. In the section on adult intelligence in his recent book, Bloom (1964, p. 80-91), after reviewing fourteen longitudinal studies, concluded that the fifty year curve of intelligence presented by Bayley (1955) on the basis of evidence from three longitudinal studies, provides our current best estimate of the relation between age and learning ability. The conclusion was that ability to learn increases

rapidly from birth to around age twenty, and then more gradually until at least age fifty. For adults, the variability associated with age, however, is so small compared with such variables as intelligence and prior experience (including education) that up until age 60 it is of little significance for most adult education purposes. Even in the few instances in which age has been associated with learning, in some instances the older adult with more relevant experience has an advantage, whereas in other instances in which a premium was placed on speed or on learning new information for which related but different information possessed by older adults might interfere, the younger adult has demonstrated an advantage.

The major factors that modify learning performance by older adults are listed briefly below. Not only do these factors serve as control variables for the design and interpretation of research, they are also important variables for teachers and administrators of educational programs for older people to take into account if they are to design effective programs.

1. The cluster of variables that are most influential on the learning abilities of older persons, includes levels of intelligence, education, and socio-economic status during earlier adulthood.
2. Poor health can substantially reduce learning ability.
3. Learning ability can decline with time from disuse and lack of relevant practice.
4. Requirements that the person learn at a rapid pace due to demanding time limits tends to place the older person at a disadvantage.
5. Somewhat different incentives arouse the interest in learning of older people, compared with their own previous young adulthood.

Although the first two modifying factors have implications primarily for selection and grouping of learners, the third factor on disuse suggests remedial activity, and the final two factors on pacing and motivation can be taken into account in the ways in which educators design programs for older people.

Interest in Participating in Educative Activity

As was the case for the preceding summary on learning ability, this summary on interest in adult education is also divided into three sections--indices, general trends, and modifying factors.

There are two general indices of the extent of interest that adults have regarding participation in educative activity--what they say and what they do. A few studies have asked older persons to say whether or not they would participate in an educational program if it were available. One problem in the interpretation of these results is the lack of a basis for estimating the percentage of those who say that they are interested, who would actually do so when presented with a choice situation. Two ways of assessing the action index of manifest interest are 1) to actually present alternative learning activities to a sample of adults and then ascertain the number of people who select each alternative, and 2) to compare the characteristics of program participants with those in the population of eligible adults who did not participate.

One of the few studies that have asked adults aged 65 and older about their interests regarding adult education, was conducted in Columbus, Ohio by Hendrickson and Barnes (1964). Almost one-quarter of those who were interviewed stated that they were uninterested in studying about any topic. The remainder expressed some interest in selected topics. The topics that were most often selected dealt with religion, problems of older years, gardening, travel, physical fitness, and good grooming. The percentage of older adults who expressed an interest in studying about any one of these most popular topics at a college campus or at a community center ranged from 1 to 3 per cent. Somewhat fewer older people expressed interest in topics related to psychology, managing of finances, history, public affairs, and foreign affairs. About ten per cent of those who were interviewed expressed an interest in learning about each of these most popular topics from radio or television programs.

Almost all of the studies that have used an index of manifest interest in adult education, have compared participants with non-participants. The national survey by Johnstone and Rivera (1965) found that 16 per cent of out-of school youth under age 20 had participated in some part-time adult education program during the previous year, compared with 29 per cent of those in their twenties, 25 per cent of those in their thirties, 21 per cent of those in their forties, 16 per cent of those in their fifties, 10 per cent of those in their sixties, and 4 per cent of those age seventy and older.

The Johnstone study also contained data on the relationship between type of subject matter and age. Table 2 contains data from Table 4.4 of the Johnstone report which illustrates the shift with age from vocational to cultural interests.

Table 2
Percentage of Adults studying in Each Subject matter area who were in Each of three age categories

SUBJECT	AGE CATEGORIES			
	Under 35	35 - 54	55 and over	Total
Vocational	47	46	7	100%
Recreation	43	44	13	100%
Public Affairs	31	46	22	99%
Religion	35	42	24	101%

Part of this relationship, however, is associated with level of preparatory education. Middle aged adults have completed more preparatory education than have older adults, and young adults have completed even more. Level of education is also associated with subject matter interests. Forty per cent of the adults enrolled in vocational courses had completed some college, compared with 43 per cent of those in recreational courses, and 56 per cent of those in public affairs courses. However, Knox (1962) has indicated that for adults with similar educational backgrounds in university adult education classes, there is a life cycle shift from occupational to general education interests, in which the relative interest in public affairs and the humanities increases with age.

The two general trends in the relationship between learning interest and age are 1) that expressed and manifest interest declines with age, and 2) that for those who are interested in adult education an occupational emphasis declines and a general education emphasis increases with age. The influence of level of preparatory education on interest is complex, as is the network of variables with which level of education is associated. There is some association between levels of education and verbal ability. The association between level of education and participation during the previous year in adult education is very strong, ranging from nine per cent of those who completed eight years of schooling, to 15 per cent of those who completed some high schook, to 24 per cent of high school graduates, to 36 per cent of those who completed some college, to 39 per cent of college graduates, to 47 per cent of those who completed more than four years of college. The relationship between age, education, and interest in learning more about something, is illustrated by Table 3 that was included as Table 9.4 in the Johnstone study.

Table 3
Age, Education, and Interest in Learning
(Per cent in each category who expressed learning Interest)

	AGE CATEGORIES		
Educational Level	Under 30	30 - 49	50 and Over
College	96%	88%	68%
High School	80%	79%	61%
Grade School	65%	68%	46%

Clearly both age and education are associated with interest, as is illustrated by the fact that 68 per cent of the adults between age 30 and 49 who did not go beyond grade school stated a learning interest, and this was the same percentage of adults over 50 who had gone to college who did so.

Level of preparatory education can be thought of as a modifying factor in the relationship between age and interest in continuing education. Two additional modifying factors are personality and changes in major life roles. The recent research studies on personality and aging by Reichard and associates (1962) and by Neugarten and associates (1964) have identified shifts with age in the

characteristic ways in which adults make choices and relate to other people, and also differing patterns of adjustment to old age. Regarding personality change during adulthood, there is some evidence that when presented with the same problem situations, the characteristic response of young adults is action, compared with efforts to attain understanding for adults who are middle aged, and for older adults a more characteristic response is mysticism and explanation based on reference to forces beyond the control and understanding of the individual. To the extent that this type of personality change occurs, it would be anticipated that along with some decline in interest in education there would be some corresponding shift in the ways in which continuing education would be used. Of the various adjustment patterns some such as the mature, constructive type or the dependent type would be expected to be more likely to utilize education to facilitate adaptation, than would be the case for older adults who were highly defensive, or angry, or full of self hate.

The final modifying factor to be noted in this context is the experience of undergoing changes in major life role relationships. Adult life can be viewed as having a relatively high degree of stability and equilibrium in the pattern of participation, interpersonal relationships, and attitudes; with this relatively stable pattern punctuated by critical events. A critical event is defined as a major change in life circumstances involving an alteration in relationships with significant others that is major, abrupt, and important to the individual. Examples include the first job, marriage, birth of the first child, oldest child starting school, youngest child starting school, youngest child leaving home, major job change, move to a new community, retirement, and death of the spouse. The influence of the critical event is then to withdraw some major role relationships and/or to add some. The result is an inescapable requirement for adaptation. It is assumed that most adults are different after most of these major critical events and that in the aggregate, the adaptation resulting from these critical events constitutes a major part of adult

development during the adult life cycle. Between periods surrounding major change events, th pattern of participation can be characterized by a high degree of stability and predictability, resulting from personality, habit, and the relatively constant expectations of others. Adult education participation can be viewed as a component of educative coping behavior. Educative coping behavior is that portion of all activities within the individual's role adaptation strategy, that involves active efforts to alter ones own competence as a means of adaptation to a critical event, such as retirement. It may involve alteration of skills, knowledge, and attitudes. Adult education participation includes those instances of educative activity in which an outside agency, such as a golden age club, contributes to the organization of learning experiences. When a major change in life circumstances produces, for at least some adults, a period of disruption of a normally quasi-stable structure of social interrelationships, it is assumed that a need for adaptation results, and that heightened readiness to engage in educative activity will be produced. The resulting educative activity may be directly or indirectly related to the change event and the relation may or may not be recognized by the individual. This might occur when the onset of a serious illness for an aged husband is followed by his wife's increased interest in financial arrangements. It is this period of heightened readiness to adapt, that has been called a teachable moment.

One of the current needs in research related to adult development and to adult education is to discover the extent to which older people experience heightened readiness to learn during the time periods surrounding major role change events. The existence of teachable moments would provide important leverage for encouraging a greater proportion of older people to become consumers of education.

Social and Personal Influences on Participation

By way of summary, many of the variables that have been referred to in this statement can be conceptualized as a flow of effects, with successful

participation by older people as consumers of education as a point of culmination. The two primary influences on participation are learning abilities and learning interests. Both ability and interest are affected by a variety of secondary influences, some of which are mainly social and some of which are mainly personal. The following outline lists these types of variables. Following each of the primary and secondary influences are some brief generalizations.

I. Criterion Variable - Successful participation by older people in programs of adult and continuing education.

II. Primary influences

A. Learning abilities

1. Average adult learning ability is very stable between the ages of 20 and 50, with some subsequent decline which on the average becomes accelerated during the sixties.

2. During adulthood there is greater decline for non-verbal learning tasks and those that have speed limits, than is the case for verbal tasks.

3. The range of individual differences relevant to adult education becomes greater from age 20 to age 50, so that the verbal learning ability of the most able and active learners in their fifties is typically greater than it was when they were age 20.

4. The average decline in learning ability for adults between 50 and 80 results from the inclusion of some who experience a sharp decline in ability with the remainder who retain their learning ability with little imparement until shortly before death.

B. Learning Interests

1. There is some progressive general decline with advancing age regarding interest in adult education.

2. For adults who are interested in their own continuing education, there is an adult life cycle shift in emphasis from occupational education towards general education.
3. Interest in adult education is affected by an adult life cycle diversification of social participation that results from differential patterns of change from age 21 through 69, for each of the following types of participation:
   a. *Stability* in the general level of activity in social relations, as evidenced by extent of participation in
      1) solitary activities such as reading and leisure time projects
      2) community groups such as church, public meetings, and cultural events
      3) daily visiting with friends
   b. *Decline* with age in the variety of social relations, as evidenced by extent of
      1) attendance at public spectator events such as movies and sporting events
      2) taking vacation trips
      3) time spent listening to radio or recorded music
      4) belonging to informal friendship groups
      5) participation in a favorite leisure time activity that is active and gregarious.
   c. *Fluctuations* during the adult life cycle related to shifting roles and statuses, as evidenced by
      1) frequency of attendance at meetings
      2) frequency of participation in informal friendship groups
      3) extent of family participation on weekdays

4) participation in a favorite leisure time activity that is instrumental.

d. *Expansion* and then *contraction* in status relationships that are achieved through formal interaction, as evidenced by

1) number of organizational memberships

2) extent of political participation

e. *Increase* in informal and intimate primary social relationships related to ascribed status, as evidenced by

1) close friendship relationships such as agreeing, confiding, and having common interests

2) having a large number of friends

3) participation in a favorite leisure time activity that contrasts with work

4) spending weekends with family

4. The combination of learning interests and learning opportunities is reflected in adult life cycle shifts in adult education participation.

a. during young adulthood an emphasis on occupational and family life

b. during middle age an emphasis on job changes and upward mobility for men, a return to the labor force for women, and community life for both.

c. during later maturity an emphasis on historical continuity, and an orientation for an adjustment regarding what the individual is retiring from and increasingly a preparation for the new activity.

III. Secondary influences

A. Social factors

1. Positive societal expectations regarding the role of older persons encourages interest and to some extent ability as reflected in performance.
2. The availability of major life role relationships facilitates participation.
3. The availability of an extensive educational opportunity system in the community in terms of day time programs and low cost of programs encourages interest and helps to maintain ability.

B. Personal factors

1. Low levels of physical and mental health will constrain educative activity (Hendrickson and Barnes indicated that one quarter of their interviewees had retired due to poor health.)
2. Low income will also restrict participation (Hendrickson and Barnes found that half of the interviewees were living on less than $150 per month.)
3. Limited mobility will restrict participation. (Hendrickson and Barnes found that about one-quarter of the interviewees drove a car.)
4. Use of less formal means of information seeking will encourage educative activity. (Hendrickson and Barnes found that about 30 per cent read books but that 90 per cent read the newspaper and watched T.V.)
5. Level of preparatory education is highly correlated with participation by older people in continuing education.
6. Orientation towards continuing education is also influenced by personality characteristics such as receptivity to new activity,

need for affiliation, and the ability to maintain a sense of the integrity of the self in the face of losses during old age.

IV. In concert, these variables interact to influence the extent to which older people will be consumers of education. The demands and constraints of the social opportunity system of group and community, interact with the personal limitations, needs, and capacities of the individual, to influence his interests and abilities related to education. Within this context, abilities and interests influence participation in educative activity. The challenge to practitioners who work with older people, is to diagnose for their clients the unique pattern of facilitators and barriers related to the consumption of education, and to identify and modify those strategic factors that will enable larger numbers of older people to more effectively utilize education to achieve their objectives.

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